



Appln. No. 10/063,840
Docket No. 121800 / GEM-0007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No.:	10/063,840	:	Confirmation No.:	7974
Applicant:	Kishore C. Acharya et al.	:	Group Art Unit:	3737
Filed:	May 17, 2002	:	Examiner:	Jung, William
Docket No.:	121800/GEM-0007	:		

For: A METHOD AND SYSTEM FOR ASSOCIATING AN EKG WAVEFORM
WITH A CT IMAGE

September 1, 2005

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed concurrently with a Notice of Appeal. This review is requested for the reason(s) stated on the attached sheet(s), which do not exceed more than five (5) pages.

Reasons begin on page 2 of this paper.

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope, addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, at the United States Patent and Trademark Office, on the date shown below.

Kim Lawrence
Name

Signature

9/1/05
Date

REASONS

Regarding Claims 1, 13, 23, 24 and 25

The claim limitation at issue is directed to “***communicating an exposure marker-in signal to said electrocardiogram device*** such that said exposure marker-in signal is associated with the EKG waveform data”. (Emphasis added). All of the subject claims are independent claims having the noted limitation.

The Examiner alleges that Heuscher et al. anticipates the claimed invention under 35 U.S.C. §102(b). Final Action, Paper No. 26042005, pages 3-4.

Applicant respectfully disagrees that Heuscher discloses ***each and every element of the claimed invention arranged as claimed***. Applicant’s paper “Response Under 37 CFR 1.116”, dated June 30, 2005, pages 9-12.

In alleging anticipation, the Examiner states that Heuscher et al. anticipates the limitation of “communicating an exposure marker-in signal to said electrocardiogram device such that said exposure marker-in signal is associated with the EKG waveform data”, by stating: “Examiner would like to point out that Heuscher et al anticipate (sic) the above limitation since the CT image acquisition is gated by ECG or EKG where the gating provides specific phase, in other words, marker in the ECG or EKG.” Final Action, Paper No. 26042005, page 2.

The Examiner further asserts that the “Heuscher et al device inherently discloses” the above-noted limitation, and that the “marker-in signal is disclosed” in Heuscher. Final Action, Paper No. 26042005, page 2.

Applicant has pointed out that the claimed invention is directed to an exposure marker-in signal that is communicated ***from*** the CT imaging device ***to*** the electrocardiogram device for ***overlaying*** the EKG waveform at the EKG device with data to indicate the start of the CT scan. Applicant’s Response paper dated June 30, 2005, pages 10-11.

In alleging anticipation, the Examiner remarks that disclosure of “communicating an exposure marker-in signal to said electrocardiogram device such that said exposure

marker-in signal is associated with the EKG waveform data” is clearly met by Heuscher by referencing Heuscher at col. 2, lines 13-24; col. 2, line 62 – col. 3, line 8; col. 4, line 7 – col. 7, line 59, and at figures 1 and 2. Final Action, Paper No. 26042005, pages 3-4, and Advisory Action, Paper No. 24072005, page 1.

Contrary to the Examiner’s allegation, Applicant finds Heuscher as referenced to be absent any *clear* disclosure of a marker-in signal being communicated *from* the CT imaging device *to* the electrocardiogram device, and therefore respectfully submits that each and every element of the claimed invention arranged as claimed is not met by Heuscher.

In the Advisory Action, Paper No. 24072005, page 1, the Examiner states under paragraph numeral 11: “Examiner would like to alos (sic) point out that, in regard to the remarks, the ‘exposure marker-in signal communication’ is clearly met by the reference cited in the previous office action. The motivation for using cardiac cycle with ECG oe (sic) EKG waveform is to obtain images at [the] (sic) same peak waveform for the cardiac cycle to reduce motion artifcat (sic). ***Thus, the exposure of CT image acquisition at ECG or KG (sic) gated control is identical to the claimed invention in [the] (sic) current application.***” (Emphasis added).

Here, the Examiner appears to be equating EKG gated CT imaging (discussed in Heuscher at col. 1, lines 65-67), which involves communication *from* the EKG device *to* the CT device for initiating CT imaging, with the claimed limitation, which involves communication *from* the CT device *to* the EKG device for overlaying EKG data with an exposure marker-in signal. As such, Applicant finds the alleged anticipatory communication of Heuscher to be in a direction opposite to the communication of the instant invention, and therefore cannot be anticipatory.

Applicant respectfully submits that absent a showing of each and every element of the claimed invention arranged as claimed, the Examiner has not properly met the burden of showing a prima facie case of anticipation.

Regarding Claims 3, 4, 15, 16, 28, 29 and 30

Claims 3 and 15 are dependent claims that include the limitation, "...introducing an event signal to said electrocardiogram device *so as to overlay* the EKG waveform data with said event signal...". (Emphasis added).

Claims 4 and 16 are dependent claims that include the limitation, "...*so as to overlay* the EKG waveform data with said exposure marker-in signal." (Emphasis added).

Claim 28 is a dependent claim that includes the limitation, "...*communicating* said generated exposure marker-in signal *to said electrocardiogram device*." (Emphasis added).

Claim 29 is a dependent claim that includes the limitation, "...*so as to overlay* the EKG waveform data and indicate the start of a CT scan." (Emphasis added).

Claim 30 is a dependent claim that includes the limitation, "...*communicates the generated exposure marker-in signal to said electrocardiogram device* such that the generated exposure marker-in signal is associated with the EKG waveform data." (Emphasis added).

The Examiner alleges that Heuscher "inherently anticipates" the claimed invention, but also acknowledges that Heuscher "is silent as to the display format of the ECG or EKG data". Final Action, Paper No. 26042005, page 4.

On pages 13-14, of Applicant's Response paper dated June 30, 2005, Applicant remarks that Heuscher lacks anticipation of each and every element arranged as claimed.

Applicant respectfully submits that absent a showing of each and every element of the claimed invention arranged as claimed, and more specifically, absent a showing of *the exposure marker-in signal being communicated to the EKG device, or the EKG waveform data being overlayed with the exposure marker-in signal*, Heuscher falls wholly short of being anticipatory. Accordingly, Applicant respectfully submits that the Examiner has not properly met the burden of showing a prima facie case of anticipation.

Regarding Claims 7 and 18

Claims 7 and 18 are dependent claims that include the limitation, "...introducing said exposure marker-in signal *to* said electrocardiogram device *so as to associate* said exposure marker-in signal *with the start of* a computed tomography imaging system scan." (Emphasis added).

The Examiner alleges anticipation of the claimed invention for the same reasons set forth above regarding Claim 1. Final Action, Paper No. 26042005, pages 3-4.

However, in alleging anticipation, the Examiner does not state with specificity where Heuscher discloses *the exposure marker-in signal being introduced to the electrocardiogram so as to associated the exposure marker-in signal with the start of a computed tomography imaging system scan*, which is specifically claimed for in the instant invention.

On page 12 of Applicant's Response paper dated June 30, 2005, Applicant remarks that Heuscher lacks anticipation of each and every element of the claimed invention arranged as claimed.

Applicant respectfully submits that absent a showing of each and every element of the claimed invention arranged as claimed, and more specifically, absent a showing of introducing said exposure marker-in signal *to* said electrocardiogram device *so as to associate* said exposure marker-in signal *with the start of* a computed tomography imaging system scan, Heuscher falls wholly short of being anticipatory. Accordingly, Applicant respectfully submits that the Examiner has not properly met the burden of showing a prima facie case of anticipation.

In light of the forgoing, as well as remarks made in prior submissions, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) fall wholly short of properly establishing a prima facie case of anticipation. Accordingly, withdrawal of these rejections and notice of allowance of the claims is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees that may be required for this submission, or credit any overpayment, to Deposit Account No. 07-0845.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

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